In the Claims:

Please amend the claims as follows:

1-4 (cancelled)

5. (currently amended) A method for voltage stabilization of an electrical power network system comprising a producing power network system ~~side,~~ side and a consuming power network side comprising ~~a power load~~ a transformer, a power transmission line with an impedance Z_{LN} connected to a primary side of the transformer, ~~a transformer~~ a power load connected to a secondary side of the transformer, and an on-line tap changer added to the transformer, wherein a transformer ratio n is controlled through the on-line tap changer trying to keep the voltage V_2 on the secondary side of the transformer at a voltage reference V_{ref}, the method comprising:

measuring the impedance of the line in case of dynamic instabilities; and

changing the ~~controlling a transformer ratio n by changing a~~ voltage reference V_{ref} of the on-line tap changer, ~~wherein the voltage reference is changed~~ according to a feed forward compensation from the impedance of the line.

6. (previously presented) The method according to claim 5, wherein the feed forward compensation drives the power network system to a stable equilibrium point in a stable region, and wherein the stable region lies below a loci for maximum power transfer $n^2Y_{LD}Z_{LN}=1$, where Y_{LD} is power load admittance, Z_{LN} is transmission line impedance and n is the transformer ratio.

7. (previously presented) The method according to claim 5, wherein the feed forward compensation is provided by a first order filter $H_{ff}(s)=sT_d/(sT + 1)$, where T and T_d are tuning parameters.

8. (previously presented) The method according to claim 5, wherein a feedback controller is provided according to an equation $Vfb=-max\ (0,a(n^2Y_{LD}-1/Z_{LN})$, where n is the transformer rato, Y_{LD} is power load admittance, Z_{LN} is transmission line impedance and a is a tuning parameter that is influencing a region of attraction of an equilibrium point.